fully, recover pole maintenance expenses.[29] This provides a mild incentive for the company to replace its pole plant once it is fully depreciated, yet does not notably penalize companies for keeping poles in the ground past their economic life.

The Commission proposes to prevent net pole investment from turning negative by removing negative net salvage at that point, arguing it "...would, for the purpose of pole attachment rate calculation, restate the accumulated depreciation account to reflect only the depreciation of the pole investment, restoring the net pole investment to a positive balance. Calculating the appropriate amounts to recognize the continuing cost of pole ownership could be done as currently provided in the formula."[30]

As Attachment 5 shows, this adjustment permits pole attachment rates to decline as poles are depreciated. When net pole investment turns negative, negative net salvage value is removed from depreciation rates. From that moment on, pole depreciation rates approach zero, and net pole investment approaches zero.

The Commission also proposed deducting the return on unadjusted pole investment once plant is fully depreciated, arguing that "...the inclusion of this negative return element is reasonable and appropriate because the utility has, in effect, already

---

[29] One possibly troubling feature of the way the existing pole attachment formula behaves as net investment approaches zero, is that the pole maintenance rate rapidly increases. However, since very high pole maintenance rates only arise when net investment approaches zero, negative rate impacts are avoided. So long as the pole maintenance rate is not applied to other types of investment, it poses no danger.

[30] Notice at 12.

recovered more than the original cost of its pole plant through depreciation charges."[31] Attachment 6 shows that this proposal has the effect of permitting rates to remain positive, but not fully recover ongoing pole maintenance expenses. This compensates ratepayers for over-recovery in early years, and also provides a mild incentive for the company to replace its pole plant once it is fully depreciated. For the same reason, MCI also concurs with the Commission's conclusion that inclusion of federal and state income taxes ought to be excluded from carrying charges at the point at which net pole investment turns negative.

Because the Commission's existing pole attachment rate formula yields the same pattern of rates over time as the formula it proposes using in this Notice, it may retain its existing formula if it finds that existing Federal Energy Regulatory and Federal Communication Commission accounting reports do not easily permit the removal of negative net salvage. MCI urges the Commission to retain its existing pole attachment formula. Southwestern Bell has raised a false alarm regarding the rate impact of declining net investment and high removal costs. The Commission's existing pole attachment formula produces constant positive declining rates that permit utilities to recover their pole maintenance costs up to the point where it becomes economically desirable to replace poles.

---

[31] Notice at 13.

The Commission also requested comment on the appropriateness of using gross book costs instead of net book costs when net investment turns negative and pole removal costs are high. Attachment 6 shows the effect of making this adjustment. It is obvious that this method fails to meet the criteria of an acceptable rate-making formula. Annual charges continue to increase as pole plant becomes depreciated, even after it is fully depreciated. Annual charges far exceed ongoing maintenance costs after plant is fully depreciated. The Commission should not utilize the gross book value adjustment method, even if it finds removing net salvage is too expensive and administratively burdensome. As discussed above, its existing formula is more appropriate and is even less administratively burdensome than moving to a gross book adjustment method.

F. Commission Should Use Interstate Rate of Return in its Pole Attachment Formula

The Commission seeks comment on whether to use the allowed interstate rate of return where states do not regulate pole attachment rates, and where there is no single allowed rate of return due to the use of some form of incentive regulation. Incentive regulation was implemented to encourage productivity increases. In exchange for being able to earn returns above a level that would have been allowed under rate of return regulation, shareholders bore a greater share of risks for returns earned below this rate of return. Between this upper and lower bound returns/losses might be shared among ratepayers and shareholders.

Because attachers face very limited alternatives to incumbents' poles, and because pole attachment services are not subject to notable productivity increases, it is appropriate to restore the application of a single rate of return for pole rate-setting purposes. MCI supports the Commission's selection of its currently allowed interstate rate of return as the default rate of return in its pole attachment formula. The methods used by the Commission to determine the rate of return comply with commonly accepted methods. Moreover, interstate services and the facilities supporting their provision, do not significantly differ from facilities supporting the provision of intrastate services.

G. The Pole Attachment Formula Should be Applied to Transmission Towers

In its First Report and Order Implementing the Local Competition Provisions in the 1996 Act, the Commission determined that electric company transmission facilities were included in the generic term "pole."[32] MCI supports this decision, and has documented the feasibility and necessity of new telecommunications entrants attaching to transmission facilities.[33] Consequently, the Commission must ensure that just and reasonable rates for attaching to electric transmission facilities are available to

---

[32] See, ¶ 1184, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, *First Report and Order*, CC Docket No. 96-98, 11 FCC Rcd 15499 (1996). "We believe that the breadth of the language contained in section 224(f)(1) precludes us from making a blanket determination that Congress did not intend to include transmission facilities."

[33] See, Attachment 1, May 16, 1997 letter to Meredith Jones, discussing MCI's experience attaching to transmission facilities and conduit of electric utility companies.

attachees.

MCI recommends the Commission modify its current pole attachment formula so it may estimate the average cost of attaching to transmission facilities. In order to develop a rate formula that results in just and reasonable average rates, the Commission would need to determine: (1) a presumptively accurate amount of total usable space on a typical transmission tower; and (2) a presumptively accurate adjustment factor to eliminate non-pole related investments from net transmission facility investments.[34] MCI recommends the Commission issue a further notice of proposed rulemaking to determine presumptive usable transmission space and non-pole investment levels. Until the Commission determines a presumptively accurate amount of total usable space on a typical transmission tower and an appropriate adjustment factor to eliminate non-pole related investments, the Commission should require electric utility companies to apply the pole attachment formula to their transmission facilities. This will require them to estimate average usable space and the adjustment factor appropriate for their facilities, and use appropriate FERC transmission facility investment and expense accounts to estimate transmission facility maintenance carrying rates, transmission facility depreciation carrying rates factors, and net transmission facility investment.

---

[34] Once these presumptive figures have been determined, electric companies may use the amounts in transmission facility asset and expense accounts to calculate a transmission maintenance carrying charge rate, and a transmission facility depreciation carrying charge rate. The other carrying charge factors are non-plant specific and would be available from current pole attachment rate calculations.

III. Pricing for Underground Conduit and Buried Facilities

A. The Commission Should Not Apply Underground Conduit Rates to Buried Facilities

The Communications Act requires utility companies to make their ducts, conduits, and other rights-of-way owned or controlled by the utility available at just, reasonable, and non-discriminatory rates.[35] In its Notice, the Commission seeks comment on rate-setting methods for conduit. However, Congress also included buried cable in the generic term "pole attachments." Consequently, the Commission must ensure that there is a rate-setting formula appropriate for each type of utility structure. Since investment and maintenance costs differ significantly among buried structure and underground structure, it would not be appropriate to use average underground conduit costs per duct foot to set rates for buried facilities.

MCI recommends the Commission use the same rate-setting formula, but apply different accounts for net asset and maintenance expenses for underground conduit and buried facilities. Subject to the other modifications to the Commission's proposed conduit formula discussed below, the Commission may use Accounts 2423 and 6423 for buried facilities, and accounts 2441 and 6441 for underground conduit systems.

---

[35] §47 U.S.C. 224(a)(4) and (e)(1).

B. Usable Space

1. MCI is not aware of investments located in underground conduit or buried facilities that do not serve conduit purposes

In its Notice, the Commission tentatively concludes that telephone companies do not make investments that are located in their conduit, but do not serve conduit purposes.[36] MCI concurs with this conclusion. The Commission then seeks comment on whether investments not needed for conduit purposes exist in conduit or buried facilities owned by electric companies. MCI has not encountered such investments in its dealings with electric utilities.

2. Usable space formulas

a. Conduit systems

In its Notice, the Commission tentatively concludes that measuring the actual portion of duct space occupied by an attachment could be difficult, and proposes the following formula for determining the maximum rate per attachment per duct foot.[37]

$$\text{Maximum Rate} = \frac{1 \text{ Duct}}{\text{Avg. \# of Ducts - Adjustments for reserved ducts}} \times \frac{1}{2} \times \text{Net Linear Cost of Conduit} \times \text{Carrying Charges}$$

---

[36] Notice at 19.

[37] MCI conceives of conduit and trench as "structures" capable of containing one or more ducts. A conduit is usually underground or on bridges. A trench is dug into the ground. Ducts refer to single enclosed tubes, or pipes, that may be capable of carrying multiple innerducts. Innerducts subdivide a duct into smaller channels.

The second term on the right hand side of the equation — (1/2) — determines the presumptive amount of a duct that is required for a single attachment.[38] This is identical to the inverse of the number of innerducts able to subdivide an average duct. The Commission in effect concludes that the presumptive number of innerducts that can be pulled through each duct is two. Actually, a standard 4 inch duct is easily capable of being subdivided 3 to 4 times. MCI recommends the Commission adopt "three and one-half" (3.5) as the presumptive number of innerducts that can be pulled per duct in each conduit system or trench. Typically, ducts are 4 inches in diameter, and are capable of containing three (3), 1.5 inch innerducts, or four (4), 1 inch innerduct. The development of fiber optic technology will undoubtedly open up even greater sharing opportunities in the future. Consequently, 3.5 innerducts is a reasonable presumptive average.

The first term on the right-hand-side of the equation is meant to determine the average number of ducts available for normal use throughout a company's conduit systems. Ducts reserved for repairs and maintenance are not exclusively available for use by an attachee or the owner, and so the Commission proposes subtracting the average number of ducts dedicated to reserve per conduit system from the average number of ducts per conduit system.

---

[38] Notice at 21.

The Commission's treatment of "adjustments for reserved ducts" requires modification. Since a duct may be subdivided into innerduct, it is not necessary to reserve all of a duct for maintenance and emergency purposes. A portion of a duct will suffice. Thus, the formula should deduct the number of innerducts required for reserve purposes from the average number of innerducts per conduit system. The Commission should set the number of innerducts reserved per conduit system equal to "one" (1). Each conduit system requires one maintenance innerduct. But since this maintenance innerduct is only made available for temporary uses, there is no need to presume that more than one should be reserved for maintenance in any conduit system.[39]

Thus, an appropriate conduit rate-setting formula for conduit would be stated:

$$\text{Maximum Rate} = \frac{1 \text{ Duct}}{(3.5 \times \text{Avg. \# of Ducts Per Conduit} - 1)} \times \text{Net Linear Cost of Conduit} \times \text{Carrying Charges}$$

b. Buried facilities

It is less expensive to place ducts in trenches than underground conduit systems, especially when buried facilities occur in "new builds." Contacts with telephone outside plant engineers, architects, and property developers in several states confirm that in new subdivisions, builders typically not only prefer buried plant that is capable of accommodating multiple uses, they usually dig the trenches at their own

---

[39] Utility companies should be required to make separate estimates of the average number of ducts per structure for conduit systems on the one hand, and buried facilities on the other.

expense, and place power, telephone, and CATV cables in the trenches, if the companies are willing to supply the materials. Since investment and maintenance costs differ significantly among buried structure and underground conduit structure, MCI recommends the Commission use Accounts 2423 and 6423 for buried facilities, and accounts 2441 and 6441 for underground conduit systems.

The Commission may apply these accounts to its conduit formula for buried facilities rate-setting purposes.

$$\text{Maximum Rate} = \frac{1 \text{ Duct}}{(3.5 \times \text{Avg. \# of Ducts Per Trench} - 1)} \times \text{Net Linear Cost of Trench} \times \text{Carrying Charges}$$

First, utility companies would estimate the average number of ducts per trench. One innerduct is the appropriate reserve figure, and 3.5 is the appropriate number of innerducts per duct, as with underground conduit.

IV. Conclusion

For the above-mentioned reasons, MCI encourages the Commission to adopt the tentative conclusions that it proposes in the Notice, and to adopt the proposals suggested by MCI herein.

Respectfully submitted,
MCI TELECOMMUNICATIONS CORPORATION

Lawrence Fenster
MCI Telecommunications Corporation
1801 Pennsylvania Ave., NW
Washington, DC 20006
(202) 887-2180

June 27, 1997

Attachment 1

Ex Parte Statement
Discussing MCI's Experience
Attaching to Transmission Facilities and
Conduit of Electric Utility Companies

May 16, 1997

MCI's Experience Attaching To Electric Utility Transmission Facilities And Conduit

It is Technically Feasible to Attach to Electric Transmission Facilities and Conduit

MCI presently has agreements with a number of electric utility companies to attach either fiber optic ground wire (FOGWIRE) or all-dielectric self-supporting (ADSS) cable to their high kilovolt transmission facilities.

MCI has approximately 4,000 miles of fiber-optic ground wire attached to electric utility company transmission towers. FOGWIRE is a fiber-optic ground wire that replaces the static ground wire installed at the upper-most position of electric transmission structures. The FOGWIRE serves the static line function due to its metal shielding, while its core is capable of carrying telecommunications signals that may be used jointly by the electric utility and MCI. These arrangements have been made with over a dozen public and private utility companies operating in different parts of the country.

MCI also has approximately 200 miles of ADSS cable attached to electric utility company transmission towers. In contrast to FOGWIRE, which is attached at the top of the transmission tower, ADSS cable attachments are made in the transmission tower power space. The use of ADSS cable has permitted attachment to electric utility transmission facilities without having to take transmission lines out of service.

When electric companies find it in their interest to grant MCI access to their transmission towers, we often receive blanket access over the entire network. Thus, there do not appear to be technical grounds for limiting attachments to transmission towers to isolated instances.

MCI has also used electric conduit, and even buried our cable parallel to transmission lines crossing an electric company's right-of-way. While not required by all power companies, MCI generally uses dielectric cable to avoid induced voltage in the cable sheath.

Regulations are Required to Give New Entrants Nondiscriminatory Access to Electric Utility Transmission Facilities and Conduit

MCI personnel involved in rights-of-way negotiations report that a majority of our requests for access to electric company transmission facilities and as much

as 90 percent of our requests for access to electric company conduit are denied. However, when electric companies find it in their interest to grant us such access, it is often in exchange for access to MCI's fiber optic cables.

MCI and other new entrants to local telecommunications markets cannot rely on the economic interest of utility companies in order to gain access to their transmission facilities. Smaller companies may not have assets of interest to the electric utilities. Even MCI, a company with extensive nationwide assets, only gains limited access to electric transmission towers and conduit. Consequently, the Commission must apply the pole attachment requirements of the 1996 Act to electric transmission facilities and conduit in order to ensure non-discriminatory access to essential rights-of-way.

There is a Compelling Public Interest Permitting New Entrants Access to Electric Transmission Facilities and Conduit

Being denied the option of attaching to electric utility company transmission facilities and conduit would impose additional costs on MCI and other telecommunications companies seeking to enter local telecommunications markets.

Transmission facilities are generally more secure than distribution facilities. They are located away from the edge of the road where they are less prone to vehicle damage.
Transmission facilities are designed to higher structural standards than those applied to distribution facilities and consequently are sturdier and more secure. Conduit is even more secure.

MCI is able to more quickly provide service to a broad geographic area if it is able to attach to electric company transmission facilities. Transmission facilities go everywhere, and so provide extensive coverage. Also, since transmission facilities are owned by fewer parties than distribution facilities, MCI is able to negotiate fewer rights-of-way agreements. This can greatly increase the speed and cost of providing service.

Electric utility transmission systems provide an attractive design option for MCI's transport routes, especially in dense, urban areas. They provide a right-of-way source allowing aerial installation across larger distances of highways, streets, and buildings than distribution poles, thereby reducing installation and construction costs.

Attachment 2

Tables 3-4 and 3-1

Bellcore Manual of Construction Procedures,
Section 3 - Clearances
SR-TAP-001421
Issue 1
December 1989.

Table 3-4
Clearances for All Sizes of Strand and Weights of Cable

SITUATION	TYPICAL CLEARANCES ALL LOADING ARES (NOTE 1)	REMARKS
Crossing Above:		
Railroad Tracks	23.5 (Note 2)	For special railways using cars less than 72 feet high, see Table 232-1 of the NESC.
Public Roads	15.5	
Public Alleys	15.0	
Nonresidential Driveways	15.0	Includes parking lots
Residential Driveways	15.0	Communication Service Drops - 11.5 feet
Walks & Lanes	9.5	
Flat Roof Buildings	10.5	Vertical
Peak Roof Buildings	3.0	Vertical
Billboards	3.0	Horizontal and Vertical
Signs	3.0	Horizontal and Vertical
Waterways		See Table 232-1 of the NESC or the proper administrative authority
Paralleling Public Roads		
Urban	15.5	15 feet if in back of vehicular deterrents such as curbs.
Rural		Unlikely to have vehicles passing under the line. Obstacles include ditches, fences, embankments.
*Back of Obstacle	9.5	
* Not Back of Obstacle	13.0	
Public Alleys	15.0	

Notes:

1. Represents clearances that are usually applicable but are often modified by specific conditions covered by Table 232-1 of the NESC.

2. The minimum size strand required for crossing $6M strand.

Table 3-1

Minimum Vertical Clearances Between Power Facilities and Noncurrent-Carrying Parts of Communication Facilities on Poles

FACILITY	CLEARANCE (INCHES)
Power circuits, 0-8700 volts (Figure 3-3).	40
Transformer case or capacitor case (nongrounded) 0-8700 volts (Figure 3-4).	40
Transformer case or capacitor case (effectively grounded as uniform practice over a well-defined area [Figure 3-4]).	30
Transformer case or capacitor case (nongrounded) over 8700 volts (Figure 3-4).	(Note)
Power circuits, 8701-57,000 volts.	(Note)
Streetlight and traffic-signal bracket (nongrounded) (Figure 3-5).	20
Streetlight and traffic-signal bracket (effectively grounded) (Figure 3-5).	4
Drip loop of a streetlight bracket (Figure 3-5).	12
Licensee standoff assemblies	40

Note: The clearance is 40 inches plus 0.4 inches per kV over 8.7 kV.

Attachment 3

Percent of Pole Plant Depreciated

1996 Company Level Data

COSA	Gross Pole Investment (Armis Row 2411)	Accumulated Depreciation on Poles (Armis Row 390)	Percent of Pole Plant Depreciated
	($000)	($000)	
UTTX	$5,394	$5,325	99%
PTTR	$584,210	$543,294	93%
SWTR	$333,086	$304,459	91%
USTR	$228,002	$207,052	91%
UTIN	$8,821	$7,838	89%
GTFL	$28,124	$23,274	83%
AMTR	$382,242	$315,099	82%
UTOH	$42,759	$33,281	78%
RTNY	$34,759	$24,732	71%
RTTC	$34,759	$24,732	71%
NXTR	$448,842	$316,078	70%
UTNC	$19,732	$13,385	68%
GTTC	$560,522	$379,954	68%
CEFL	$7,104	$4,752	67%
CEIL	$5,373	$3,539	66%
SNCT	$145,513	$95,754	66%
UTFL	$9,531	$6,157	65%
UTTC	$212,173	$134,815	64%
ALGC	$20,128	$12,033	60%
UTNJ	$19,446	$11,580	60%
CETC	$49,820	$28,276	57%
UTPA	$54,607	$30,378	56%
CENV	$6,618	$3,570	54%
CBTC	$46,550	$24,976	54%
CEVA	$19,957	$10,564	53%
UTMO	$10,382	$5,335	51%
BSTR	$894,838	$430,692	48%
PRPR	$126,197	$56,555	45%
GTHI	$95,454	$39,131	41%
ALPA	$48,178	$16,517	34%

Attachment 4
Existing FCC Pole Attachment Formula

Year End	Net Pole Investment	Accumulated Depreciation on Poles	Accumulated Pole Depreciation %	Negative Pole Salvage Value%	Remaining Pole Life (Years)	Annual Pole Depreciation	Pole Depreciation Rate	Administrative Rate	General Tax Rate	Pole Maintenance Expense	Pole Maintenance Rate	ROR	Carrying Charge Rate	Annual Charge
1	100.00	-	0.00%	5.41	10	10.54	11%	2%	4%	$2	2%	11%	30%	29.84
2	89.46	10.54	10.54%	5.70	10	9.52	10%	2%	4%	$2	2%	11%	29%	26.09
3	79.94	20.06	20.06%	6.00	10	8.59	9%	2%	4%	$2	3%	11%	29%	22.91
4	71.35	28.65	28.65%	6.31	10	7.77	8%	2%	4%	$2	3%	11%	28%	20.20
5	63.58	36.42	36.42%	6.64	10	7.02	7%	2%	4%	$2	4%	11%	28%	17.90
6	56.56	43.44	43.44%	6.99	10	6.36	6%	2%	4%	$3	5%	11%	28%	15.93
7	50.21	49.79	49.79%	7.36	10	5.76	6%	2%	4%	$3	5%	11%	28%	14.26
8	44.45	55.55	55.55%	7.75	10	5.22	5%	2%	4%	$3	6%	11%	29%	12.82
9	39.23	60.77	60.77%	8.16	10	4.74	5%	2%	4%	$3	8%	11%	30%	11.60
10	34.49	65.51	65.51%	8.59	10	4.31	4%	2%	4%	$3	9%	11%	31%	10.56
11	30.18	69.82	69.82%	9.04	10	3.92	4%	2%	4%	$3	11%	11%	32%	9.66
12	26.26	73.74	73.74%	9.51	10	3.58	4%	2%	4%	$3	13%	11%	34%	8.90
13	22.68	77.32	77.32%	10.01	10	3.27	3%	2%	4%	$4	16%	11%	36%	8.26
14	19.41	80.59	80.59%	10.54	10	3.00	3%	2%	4%	$4	19%	11%	40%	7.71
15	16.42	83.58	83.58%	11.10	10	2.75	3%	2%	4%	$4	24%	11%	44%	7.25
16	13.67	86.33	86.33%	11.68	10	2.53	3%	2%	4%	$4	30%	11%	50%	6.87
17	11.13	88.87	88.87%	12.29	10	2.34	2%	2%	4%	$4	39%	11%	59%	6.55
18	8.79	91.21	91.21%	12.94	10	2.17	2%	2%	4%	$5	52%	11%	72%	6.30
19	6.62	93.38	93.38%	13.62	10	2.02	2%	2%	4%	$5	73%	11%	92%	6.09
20	4.59	95.41	95.41%	14.34	10	1.89	2%	2%	4%	$5	110%	11%	129%	5.94
21	2.70	97.30	97.30%	15.09	10	1.78	2%	2%	4%	$5	197%	11%	216%	5.82
22	0.92	99.08	99.08%	15.89	10	1.68	2%	2%	4%	$6	606%	11%	625%	5.75
23	(0.76)	100.76	100.76%	16.72	10	1.60	2%	2%	4%	$6	-769%	11%	-750%	5.71
24	(2.36)	102.36	102.36%	17.61	10	1.52	2%	2%	4%	$6	-261%	11%	-242%	5.70
25	(3.88)	103.88	103.88%	18.53	10	1.46	1%	2%	4%	$6	-166%	11%	-147%	5.72
26	(5.35)	105.35	105.35%	19.51	10	1.42	1%	2%	4%	$7	-127%	11%	-108%	5.77
27	(6.76)	106.76	106.76%	20.53	10	1.38	1%	2%	4%	$7	-105%	11%	-86%	5.85
28	(8.14)	108.14	108.14%	21.61	10	1.35	1%	2%	4%	$7	-92%	11%	-73%	5.95
29	(9.49)	109.49	109.49%	22.75	10	1.33	1%	2%	4%	$8	-83%	11%	-64%	6.07
30	(10.81)	110.81	110.81%	23.95	10	1.31	1%	2%	4%	$8	-76%	11%	-58%	6.22

Attachment 5

Rate Impact of Removing Net Salvage From Existing FCC Pole Attachment Formula

Year End	Adjusted Net Pole Investment	Un-Adjusted Net Pole Investment	Accumulated Pole Depreciation %	Negative Pole Salvage Value%	Remaining Pole Life	Annual Pole Depreciation	Pole Deprec. Rate 1	Pole Deprec. Rate 2	Admin Rate	Tax Rate	Pole Maintenance Expense	Pole Maintenance Rate	ROR	Carrying Charge Rate 1	Carrying Charge Rate 2	Annual Charge
1	$100	$100	0	5	$10	10.5	11%	11%	2%	4%	$2	2%	11%	30%	-	$30
2	$89	$89	11	6	$10	9.5	10%	10%	2%	4%	$2	2%	11%	29%	-	$26
3	$80	$80	20	6	$10	8.6	9%	9%	2%	4%	$2	3%	11%	29%	-	$23
4	$71	$71	29	6	$10	7.8	8%	8%	2%	4%	$2	3%	11%	28%	-	$20
5	$64	$64	36	7	$10	7.0	7%	7%	2%	4%	$2	4%	11%	28%	-	$18
6	$57	$57	43	7	$10	6.4	6%	6%	2%	4%	$3	5%	11%	28%	-	$16
7	$50	$50	50	7	$10	5.8	6%	6%	2%	4%	$3	5%	11%	28%	-	$14
8	$44	$44	56	8	$10	5.2	5%	5%	2%	4%	$3	6%	11%	29%	-	$13
9	$39	$39	61	8	$10	4.7	5%	5%	2%	4%	$3	8%	11%	30%	-	$12
10	$34	$34	66	9	$10	4.3	4%	4%	2%	4%	$3	9%	11%	31%	-	$11
11	$30	$30	70	9	$10	3.9	4%	4%	2%	4%	$3	11%	11%	32%	-	$10
12	$26	$26	74	10	$10	3.6	4%	4%	2%	4%	$3	13%	11%	34%	-	$9
13	$23	$23	77	10	$10	3.3	3%	3%	2%	4%	$4	16%	11%	36%	-	$8
14	$19	$19	81	11	$10	3.0	3%	3%	2%	4%	$4	19%	11%	40%	-	$8
15	$16	$16	84	11	$10	2.8	3%	3%	2%	4%	$4	24%	11%	44%	-	$7
16	$14	$14	86	12	$10	2.5	3%	3%	2%	4%	$4	30%	11%	50%	-	$7
17	$11	$11	89	12	$10	2.3	2%	2%	2%	4%	$4	39%	11%	59%	-	$7
18	$9	$9	91	13	$10	2.2	2%	2%	2%	4%	$5	52%	11%	72%	-	$6
19	$7	$7	93	14	$10	2.0	2%	2%	2%	4%	$5	73%	11%	92%	-	$6
20	$5	$5	95	14	$10	1.9	2%	2%	2%	4%	$5	110%	11%	129%	-	$6
21	$3	$3	97	15	$10	1.8	2%	2%	2%	4%	$5	197%	11%	216%	-	$6
22	$1	$1	99	16	$10	1.7	2%	2%	2%	4%	$6	606%	11%	625%	-	$6
23	$(0.76)	$(1)	101	17	$10	(0.08)	0%	2%	2%	4%	$6	-769%	11%	-763%	-11%	$6
24	$(0.68)	$(2)	101	18	$10	(0.07)	0%	2%	2%	4%	$6	-897%	11%	-891%	-11%	$6
25	$(0.62)	$(4)	101	19	$10	(0.06)	0%	2%	2%	4%	$6	-1047%	11%	-1041%	-11%	$6
26	$(0.55)	$(6)	101	20	$10	(0.06)	0%	2%	2%	4%	$7	-1221%	11%	-1215%	-11%	$6
27	$(0.50)	$(8)	100	21	$10	(0.05)	0%	2%	2%	4%	$7	-1425%	11%	-1419%	-11%	$6
28	$(0.45)	$(10)	100	22	$10	(0.04)	0%	2%	2%	4%	$7	-1662%	11%	-1656%	-11%	$6
29	$(0.40)	$(12)	100	23	$10	(0.04)	0%	2%	2%	4%	$8	-1939%	11%	-1933%	-11%	$6
30	$(0.36)	$(14)	100	24	$10	(0.04)	0%	2%	2%	4%	$8	-2262%	11%	-2256%	-11%	$7

Attachment 5 — Continued

Explanatory Notes

1. Pole Depreciation 1 removes negative net salvage value from calculation when net investment turns negative.

2. Pole Depreciation 2 is the unadjusted depreciation rate as per current formula.

3. Adjusted Net Pole Investment uses pole depreciation rate 1.

4. UnAdjusted Net Pole Investment uses pole depreciation rate 2.

5. Carrying Charge rate 1 is the sum of administrative, tax, pole maintenance and ROR when net investment is positive, and the sum of administrative, tax, and pole maintenance when net investment is negative.

6. Carrying Charge rate 2 is -11.25% when net investment is negative.

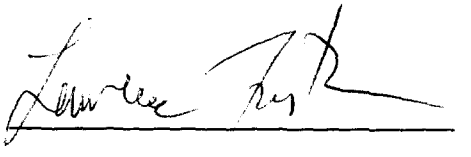
7. Annual Charge is the product of carrying charge 1 and unadjusted net investment when net investment is positive; and the product of carrying charge 1 and adjusted net investment offset by 11.25% times unadjusted investment when net investment is negative.

Attachment 6
Gross Book Value Adjustment

Year End	Gross Pole Investment	Administrative Rate	General Tax Rate	Pole Maintenance Expense	ROR	Carrying Charge Rate	Annual Charge
1	$100	2%	4%	$2	11%	17%	19.30
2	$100	2%	4%	$2	11%	17%	19.40
3	$100	2%	4%	$2	11%	17%	19.51
4	$100	2%	4%	$2	11%	17%	19.62
5	$100	2%	4%	$2	11%	17%	19.73
6	$100	2%	4%	$3	11%	17%	19.85
7	$100	2%	4%	$3	11%	17%	19.98
8	$100	2%	4%	$3	11%	17%	20.11
9	$100	2%	4%	$3	11%	17%	20.25
10	$100	2%	4%	$3	11%	17%	20.40
11	$100	2%	4%	$3	11%	17%	20.56
12	$100	2%	4%	$3	11%	17%	20.72
13	$100	2%	4%	$4	11%	17%	20.89
14	$100	2%	4%	$4	11%	17%	21.07
15	$100	2%	4%	$4	11%	17%	21.26
16	$100	2%	4%	$4	11%	17%	21.46
17	$100	2%	4%	$4	11%	17%	21.67
18	$100	2%	4%	$5	11%	17%	21.88
19	$100	2%	4%	$5	11%	17%	22.11
20	$100	2%	4%	$5	11%	17%	22.35
21	$100	2%	4%	$5	11%	17%	22.61
22	$100	2%	4%	$6	11%	17%	22.87
23	$100	2%	4%	$6	11%	17%	23.15
24	$100	2%	4%	$6	11%	17%	23.44
25	$100	2%	4%	$6	11%	17%	23.75
26	$100	2%	4%	$7	11%	17%	24.07
27	$100	2%	4%	$7	11%	17%	24.41
28	$100	2%	4%	$7	11%	17%	24.77
29	$100	2%	4%	$8	11%	17%	25.14
30	$100	2%	4%	$8	11%	17%	25.53

STATEMENT OF VERIFICATION

I have read the foregoing and, to the best of my knowledge, information and belief, there is good ground to support it, and it is not interposed for delay. I verify under penalty of perjury that the foregoing is true and correct. Executed on June 27, 1997.



Lawrence Fenster
1801 Pennsylvania Ave., N.W.
Washington, D.C. 20006
(202) 887-2180

CERTIFICATE OF SERVICE

I, Barbara Nowlin, do hereby certify that a copy of the foregoing **Comments** has been sent by United States first class mail, postage prepaid, hand delivery, to the following parties on this 27th June, 1997.

Reed E. Hundt**
Chairman
Federal Communications Commission
Room 814
1919 M Street, NW
Washington, DC 20554

Rachelle E. Chong**
Commissioner
Federal Communications Commission
Room 844
1919 M Street, NW
Washington, DC 20554

James H. Quello**
Commissioner
Federal Communications Commissioner
Room 802
1919 M Street, NW
Washington, DC 20554

Susan P. Ness**
Commissioner
Federal Communications Commission
Room 832
1919 M Street, NW
Washington, DC 20554

Meredith Jones
Bureau Chief
9th Floor
Cable Services Bureau
2033 M Street, NW
Washington, DC 20554

****Hand Delivery**

Warren O'Hearn**
9th Floor
Cable Services Bureau
2033 M Street, NW
Washington, DC 20554

Margaret Egler, Esquire
9th Floor
Cable Services Bureau
2033 M Street, NW
Washington, DC 20554

International Transcription Service
2100 M Street, NW
Suite 140
Washington, DC 20037

Barbara Nowlin